#322

Title: Chart of the Ocean Sea

Date: 1513

Author: Piri Re'is

Description: During a naval campaign against Venice in 1501, a Turkish fleet captured a Spanish ship in the western Mediterranean. One of the prisoners taken had earlier made three voyages to the West Indies with Columbus and carried with him a set of Columbus's American charts. In this fortuitous manner Kemal Re'is, the famous Turkish admiral, acquired maps of great importance showing a newly discovered part of the world.

Piri Re'is, nephew of Kemal, was born in Gallipoli on the shore of the Dardanelles in 1470. Piri also became an admiral and is remembered as a scholar of navigational science and an accomplished linguist. He produced charts, an important book on navigation, and a superb map of the world, which employed the Columbus maps taken by his uncle's sailors. Although fragmentary, this work and the Zorzi sketches (#304) are the only world maps with a direct Columbus delineation for part of America.

The map found its way to Suleiman the Magnificent's Topkapi Palace where it remained undetected for four centuries. In 1929 this remaining fragment was discovered when the palace was being converted to a national museum. Delineated in nine colors, the map shows the Atlantic Ocean and adjoining parts of South and Central America, the islands of the West Indies, and parts of southwestern Europe and West Africa. Many lengthy notes in Turkish appear on the map, including geographical descriptions and detailed information on the sources of the delineation. There are references to the voyage of St. Brendan, the legendary Irish monk who in the sixth century supposedly discovered an island in the North Atlantic called the "Promised Land of the Saints." Long sought by sailors, St. Brendan's island was widely believed to exist in Columbus's time and appeared in some form and location on most early European maps. According to Piri Re'is himself, the map was based upon eight Ptolemy maps, an Arabic map of India, four new Portuguese sea maps of Sind, Hind and China, and the map of America drawn by Columbus.

A long passage describes Columbus's first voyage experiences, from initial difficulties in obtaining sponsorship to encounters with the natives. Piri Re'is specifically mentions his use of the West Indies charts drawn by Columbus. He also refers to information from Portuguese and Arabic sources that proved important in developing his delineation of Africa and Asia.

The style of the map is European although the lengthy commentary is written in Turkish. Piri comments that no one in Turkey had ever seen such a map. Presumably he referred to both the novelty of its delineation and the profuse depictions of people and animals that violated the customary Islamic prohibition against portraying living objects in artworks. The map was not

only unusual in Turkey, but few people in any country, including Spain and Portugal, had access to a chart of the world incorporating the new discoveries.

The coastline of northeastern South America indicates that information came from Ojeda, Vespucci, or one of their companions. The West Indies are poorly drawn and difficult to recognize. While Guadaloupe and the islands immediately adjacent in the Lesser Antilles are remarkably accurate; the island of Hispaniola [Haiti] has quite a different form here from other contemporary maps, it is more reminiscent of the contemporary shape of the East Asian island, then called Cipangu [Japan]. For these Piri Re'is no doubt had a Columbus drawing. This unusual chart with its complicated and fascinating history includes the only surviving delineation by Columbus of his discoveries.

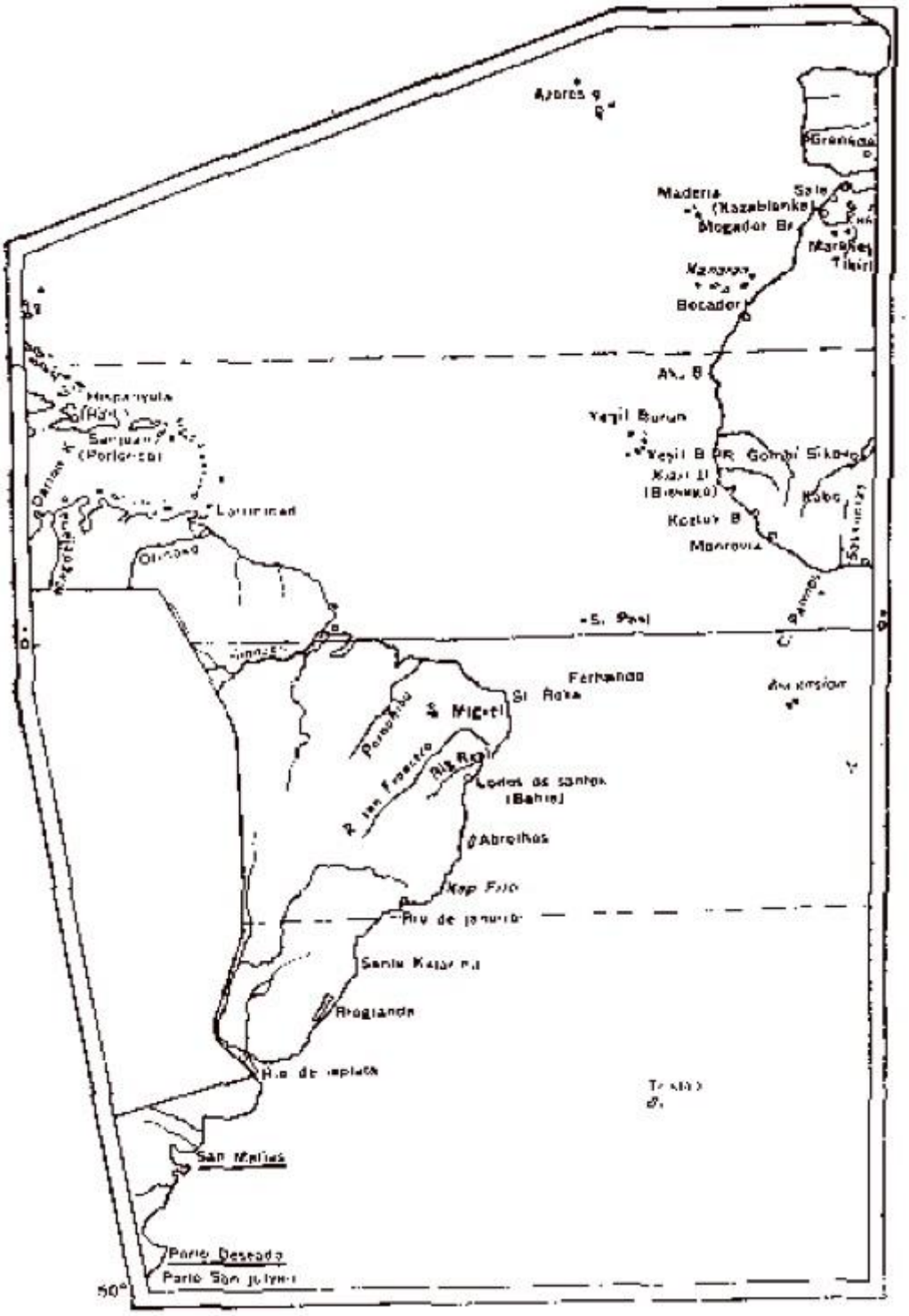
The Pri Re’is map shows some legendary cephalopods, dog-headed figures, etc. taken from ancient and medieval sources. However, it also displays a large number of real-life mammals for the first time, in South America, together with some snakes and the symbolic parrots. The parrots are green with red beaks and long tails, sitting on all of the Caribbean islands and described as being of four kinds: white, red, green and black. There are monkeys with long tails, a one- horned bovid, a two-horned spotted ungulate with a tusk, a six-horned animal, which might possibly be one of the South American hollow toothed deer with much branched antlers, and an animal that might well represent a llama were it not for its horns. A single carnivore, looking agile with its tail flourishing, resembles the very common South American martens or tayras (mustelids) but could, perhaps according to Wilma George, represent the larger, more frightening and, therefore, more written about jaguar.

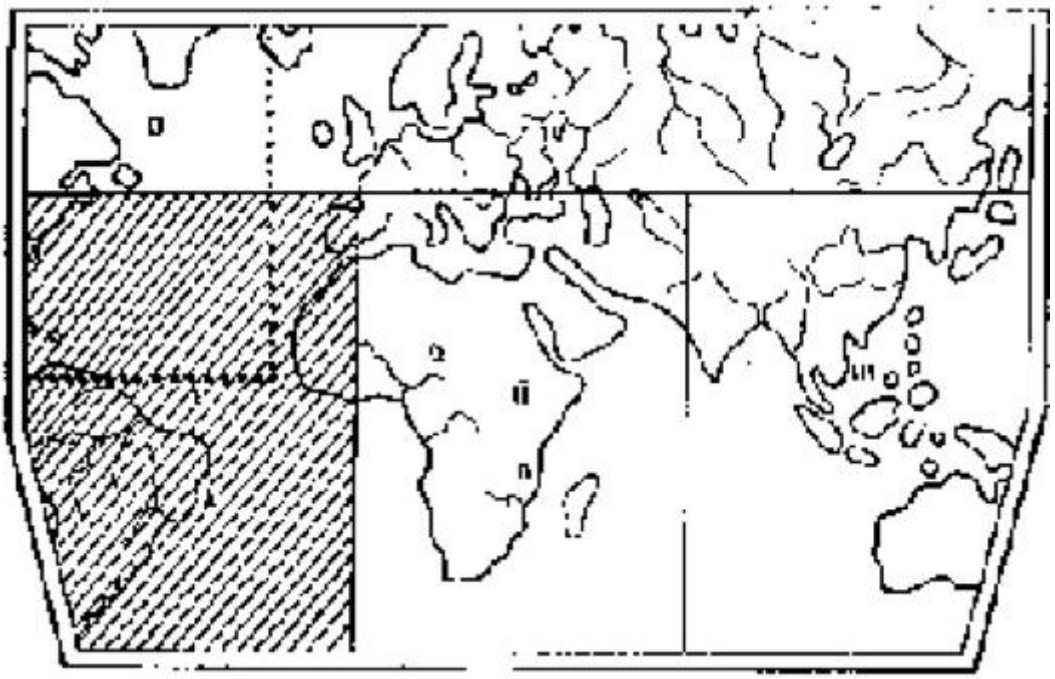
The mountains are drawn in outlines and the rivers are marked with thick tines. In the map Piri Re’is adopts and applies the rules of emblematic signs mentioned on page 28 in the Bahriye. Thus he indicates the rocky regions with black, the sandy and shallow waters with reddish dots, and the rocky parts in the sea that cannot be seen by sailors with crosses.

A close study of the map shows us how faithful Piri Re’is was to his sources. In the bibliography attached to the map he claims that his map is as sound and accurate f(r the seven seas as the map of the Mediterranean. From the various Turkish names on these coasts like Babadagi, Akburun, Yesilburun, Kizilburun, Altin Irmagi, Guzel K6rfcz, Kozluk Burnu, Iki Hurmalik Burnu, etc., we deduce that in his drawing he made use not only of the Portuguese maps in his possession, but also of the information supplied by various Turkish sailors faring along these coasts. In his drawing of the coastline and in his marking of the sites of importance on it we again notice his remarkable accuracy. He is quite accurate also in the positions of the Azores, Madeira and the Canary islands.

As for the northern part of the map, we see here how Piri Re’is benefited by the new Portuguese maps and recorded on it the discoveries made before 1508 on the North American Coast by Amerigo Vespucci, Pinzon Juan de Solis Some of the place names on the South American coast, like Santa Agostini, San Megali, San Francisco, Port Rali, Total Sante, Abrokiok, Cav Frio and Katenio show a close resemblance to their modern forms. Except for the two entries about the name and the date of the map, all the other entries are written by a calligrapher. This fact can

account for the changes to be observed in various names on the map. Another reason for this may easily be the inadequacy of the Arabic script then in use, for expressing Turkish words.


Azores
Granada
Madeira
Sale
(Kazablanka)
Mogador Br.
Marakes
Tikiri
Bocador
Yeşil Burun
Yeşil B
Gombi Sikoro
Kozluk B
Monrovia
Hispaniyola
(Haiti)
Sanjuan
(Portorico)
Larrimidad
Orinoco
S. Paul
Ferhando
St. Roka
S. Miguel
Porto Rico
R. San Francisco
Rio Rico
Lodos de santos
(Bahia)
Abrolhos
Kap Frio
Rio de janeiro
Santa Katarina
Rio de la plata
San Matias
Porto Deseado
Porto San Julyan
50°



Location of the existing fragment is shown in “shaded” area.
The dotted-line enclosure shows the area mapped by Piri Re’is’ second map.

All the principal rivers in South America are marked on the map, though the names are not written, it is remarkable that he should have shown the river La Plate on the map, when Pinzo and Juan de Solis passed by it and from all accounts, never even noticed it. Outside the parts relating to Columbus' map, the scales in miles are astonishingly accurate. The land extends unimpeded to the west from the south of lie Plate. Evidently this part of the map is drawn in accordance with the Ptolemaic idea of the world, as is also observed in Mappa Mundi. Eight years later, when he had finished his ~ in the preface to the book he affirms that, further south it is not land but sea, which shows that he was following later discoveries with careful attention. And yet, from the point of view of the historical importance of these geographic discoveries, this map is particularly significant for Central America.

Close studies here confirm the idea that the map possesses all the important information that was on the map of Columbus drawn and sent to Europe in 1498 and also on the map of Toscanelli that Columbus had in hand when he first ventured out on his voyages. This part of the map contains many imaginary islands with a picture of a parrot on each. The island of Trinidad is written as Kalerot, which probably is derived from a cape on this island that Columbus called Galera. Puerto Rico is named here San Juan Batichdo, and on its eastern coast is drawn the picture of a fortress. There is, however, another island to the west of Trinidad, again with a picture of a parrot near which is written San Juan Batichdo. Drawing various islands on the South American coast opposite Trinidad shows the influence of Columbus, who believed this newly discovered continent to be a group of islands. This is to be observed also on the island of Haiti, called by Columbus Hispanyola, and by Piri Re’is the Island of Spain: instead of showing it extending from the east to the west, as it does, he shows it extending from the north to the south, which proves that Columbus took this island to be Zipango, i.e. Japan as Marco Polo calls it and in accordance with Marco Polo's descriptions of it, the island is given this mistaken position.

The real Antilles are shown on the map not as islands, but as Columbus believed it to be, as a continent. Hence Piri Re’is calls Central America "the County of Antilia", and the North American coast "the coast of Antilia". It is true that at a certain spot quite near the North American Coast there is marked an island called the Antilia, but evidently that stood for the legendary island popularly regarded as fabulously wealthy and prosperous at the time when Columbus first started on his voyages. It is to be noted, however, that beside the island is a note that states that, contrary to the common fallacy, the island is not prosperous. Cuba, too, is shown as a continent in accordance with Columbus' firm belief. So confident was Columbus in this that while he was near the coast of Cuba in 1494 he had his conviction recorded by the notary public on the boat, Fernand Perez de Luna, and asked all the crew to sign it, as we can now see from the document signed on the 12th June, 1494, which declares that, since it is quite evident that this is a continent, thereafter whoever attempts to contradict this statement shall be fined to 10.00 Maravedis pieces and also his tongue shall be cut out. Undoubtedly the reason why Piri Re’is, too, shows it as a continent was not because he was afraid for his tongue, but because he would not question the veracity of a piece of information given by such an authority as Columbus, who had been to those parts of the world several times. Cuba is shown as a continent also in the map of Columbus dated 1498, which formed the basis for Piri Re’is later on; in the rough sketch drawn by Christopher Columbus' brother, Bartholomeo, in 1503, in the map of the world made by Ruysch in 1508, and even in the marine map by Waldeesmüller in 1507.

Piri Re’is calls the eleven islands on the south-east of Haiti "Undizi Vergine," which shows that the number of the islands is not expressed by the word "onze" which means eleven in Spanish but by its equivalent in Columbus' mother tongue, Italian. This is another indication of how faithful Piri Re’is was to Columbus' map, keeping close to the information of Columbus' map which apparently possessed all that was on the earlier Toscanelli map, Piri Re’is handed down to us the oldest map of America and informed us about various aspects of the most important phase in the history of the discoveries. By recording the explanations given by the Spaniard who had taken part in the three expeditions of Columbus and was later captured by Kemal Reis, he related the story of these discoveries from an original source free from the later legendary tales that have grown about them.

Scattered about the map are some other entries that also enlighten us about various details in the discoveries. Beside the picture of a ship near the Azores is written that this Genoese vessel came from Flanders, was shipwrecked, and that the survivors discovered these islands. From another entry we learn that the sea there is the Western Sea, but the Europeans call it the Spanish Sea, and after the discoveries of Columbus' the name is changed to Ovasana, i.e. "Ocean".

By a picture near the island of Santiano is a note stating-that the names of these places were found and given by a Genoese sailor brought up in Portugal. In anther entry close' to the picture of a ship drawn near the South American coast he summarizes all the information given in a map by Nikola di Juan who was shipwrecked there. In one of the notes on the Atlantic Ocean he mentions the Treaty of Tordesillas 1599, and a certain line that divides the Spanish and the Portuguese possessions.

Towards the north, on the map is a picture of a fish on which is drawn a woman and a man making a fire, nearby is another ship and three people in a boat. This is the story of' Santa Brandon which was very popular in the middle ages, and was recorded in the "thousand and one night" stones. But Piri Re’is does not neglect to add that the legend comes down not from the Portuguese but from the old Mappa Mundi. This shows that the Turkish geographer made use of many sources and did not neglect the latest information nearest to his age, and that he was very careful about his bibliography.

From various kinds of research work done on the map we conclude that compared with the other maps of the period, Piri Re’is’ is the most perfect and original. It will interest the Americans as one of the oldest maps of their country, and we Turks will always be proud that the author of the maps was one of us.

The Piri Re'is map of 1513 came to light in the old imperial palace at Istanbul in 1931. The Illustratcd London News published a reproduction of it on 25th February 1932, which prompted a detailed letter by a prominent Turkish historian. The magazine published this letter by Yusuf Akura Bey, National Deputy and President of the Turkish Historical Society on 23rd July 1932, of which the following is an excerpt:

The map in question is drawn on a gazelle skin by Piri Reis who had made a name for himself among the Western and Eastern Scholars through his detailed geographical book on the Mediterranean Sea entitled Bahriye [“On the Sea”] and which testifies to his capacity and knowledge in his profession. Piri Reis is the son of the brother of the famous Kemal Reis who was the Turkish admiral in the Mediterranean Sea at the last quarter of the fifteenth century. History records Piri Re’is Bey's last official post as admiral of the Fleets in the Red Sea and the

Indian Ocean. Piri Re'is wrote and completed the above-mentioned map in the city of Gelibolu (Gallipoli) in the year 1513, and four years after this date, i.e., in the year 1517, he presented personally to Selim I, the conqueror of Egypt, during the presence of the latter there.

As the same thing will be noticed in the maps of ancient and mediaeval times, the map of Piri Re'is contains important marginal notes regarding the history and the geographical conditions of some of the coasts and islands. All these marginal notes with hundreds of lines of explanation were written in Turkish. Three lines only, which from the title and head lines of the map, were written in Arabic; and this is done to comply with the usual traditional way which is noticed on all the Ottoman Turkish monuments up to the very latest centuries. These three lines in Arabic testify that the author is the nephew of Kemal Re'is, and that the work was written and compiled in Gelibolu in the vear 1513.

The map in our possession is a fragment and it was cut of from a world chart on large scale. When the photographic copy of the map is carefully examined, it will be noticed that the lines of the marginal noted [sic] on the eastern edges have been cut half away.

In one of these marginal notes the author states in detail the maps he had seen and studied in preparing his map. In the marginal note describing the Antilles Islands, he states that he has used Christopher Columbus' chart for the coasts and islands. He sets forth the narratives of the voyages made, by a Spaniard a slave in the hands of Kemal Re'is, Pin Re'is' uncle, who under Christopher Columbus made three voyages to America. He also states, in his marginal notes regarding the South American coast that he saw the charts of four Portuguese discoverers. That he has made use of Christopher Columbus' chart is made clear in the following lines of his:

"In order that these islands and their coasts might be known Columbus gave them these names and set it down on his chart. The coasts (the names of the coasts) and the islands are taken from the chart of Columbus".

The work essentially was a world map. Therefore Piri Re'is had made a study of some of the charts that represented the world, and according to his personal statement, he has studied and examined the maps prepared at the time of Alexander (the Great), the 'Mappa Mundis' and the eight maps in fragments prepared by the Muslims.

Piri Re'is himself plainly explains, in one of the marginal notes in his map, how his map was prepared:

"This section explains the way the map was prepared. Such a map is not owned by anybody at this time, I, personally, drawn [sic] and prepared this map. In preparing this map, I made use of about twenty old charts and eight Mappa Mundis, i.e. of the charts called Jaferiye by the Arabs and prepared at the time of Alexander the Great and in which the whole inhabited world was shown; of the chart of [the] West Indies; and of the new maps made by four Portugueses [sic] containing the Indian and Chinese countries geometrically represented on them. I also studied the chart that Christopher Columbus drew for the West. Putting all these material [sic] together

in a common scale I produced the present map. My map is as correct and dependable for the seven seas as are the charts that represent the seas of our countries”.

Piri Re’is, in a special chapter in his book Bahriye mentions the fact that in drawing his map he has taken note of the cartographical traditions considered international at that time. The cities and citadels are indicated in red lines, the deserted places in black lines, the rugged and rocky places in black dots, the shores and sandy places in red dots and the hidden rocks by crosses.

There are in fact 207 charts drawn by Piri Re'is in his Bahnye.

The State Department, through their ambassador in Ankara, procured reproductions of the Piri Re’is map for the Library of Congress. The Library of Congress was particularly anxious also to obtain a copy of Columbus' maps upon which Piri Re’is claimed in part to have based his own map. At that time, Columbus was popularly believed to have "discovered" America. It was not widelv recognized fifty years ago that Columbus died in the belief that he had discovered Japan. Nor was it known in the 1930's that other maritime explorers from Europe had sailed the Atlantic centuries before Columbus.

In one of the marginal notes on the map Piri mentions a Spaniard who had taken part in three of Columbus's two expeditions and was later taken prisoner by Kemal Reis. This Spaniard had given a most interesting account of Columbus to Kemal Reis. It is quite possible that he was captured during the battle when some of those articles belonging to the natives were also taken.

The map of Columbus’ in Piri's possession. was drawn in 1498, and, since we know that Kemal Reis and Piri had fought against the Spanish in 1501, Piri's acquisition of the map during that war is quite plausible.

Although Piri had drawn a map of the whole world, the portion we now have of it is only of the western coasts of Europe and Africa, the Atlantic Ocean, Central and North Americas.

The map is drawn on a roe-skin in various color. Like other contemporary maps it has no lines of longitude or latitude. Nevertheless we can see two rose-compasses one in the north and the other in the south. Each of the roses is divided into 32 parts and the division lines are extended beyond the rose frames. Each wind-rose is equal to one sea mile, as is shown in the measurements on the areas near the wind-roses. The map is 90/65 centimeters in size.

It is in various color and is decorated with numerous illustrations. In the capitals of Portugal, Marrakesh and Guinea, there are pictures of their respective sovereigns. Besides these, on Africa there are pictures of an elephant and of an ostrich, and on South America of lamas and pumas. On the oceans and along the coasts we see illustrations of ships. On both the lands and the seas

there are entries sometimes relevant, sometimes irrelevant of the pictures. They are all written in Turkish, and can also be found in his book "Bahriye".

The Following entry-notes begin from the northwest corner, turn southward, then proceed along the perimeter, and finally continuing in a winding fashion towards the center.

The Legends on the Piri Re'is Map

(From “The Oldest Map of America” by Professor Dr. Afet Inan. Ankara 1954, pp. 28-34. The Roman numerals refer to the key map.)

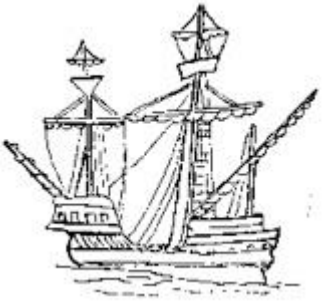
I. There is a kind of red dye called vakami, that you do not observe at first, because it is at a distance ... the mountains contain rich ores ... There some of the sheep have silken wool.

II. This country is inhabited. The entire population goes naked.

III. This region is known as the vilayet of Antilia. It is on the side where the sun sets. They say that there are four kinds of parrots, white, red, green and black. The people eat the flesh of parrots and their headdress is made entirely of parrots' feathers. There is a stone here. It resembles black touchstone. The people use it instead of the ax. That it is very hard . . . [illegible]. He saw that stone.

[NOTE: Piri Re’is writes in the Bahriye: "In the enemy ships which we captured in the Mediterranean, we found a headdress made of these parrot feathers, and also a stone resembling touchstone."]

IV. This map was drawn bv Piri Ibn Haji Mehmed, known as the nephew of Kemal Re’is, in Gallipoli, in the month of muharrem of the year 919 (that is, between the 9th of March and the 7th of April of the vear 1513).



V. This section tells how these shores and also these islands were found.

These coasts are named the shores of Antilia. They were discovered in the year 896 of the Arab calendar. But it is reported thus, that a

Genoese infidel, his name was Colombo, he it was who discovered these places. For instance, a book fell into the hands of the said Colombo, and he found it said in this book that at the end of the Western Sea [Atlantic] that is, on its western side, there were coasts and islands and all kinds of metals and also precious stones. The above-mentioned, having studied this book thoroughly, explained these matters one by one to the great of Genoa and said: "Come, give me two ships, let me go and find these places." They said: "O unprofitable man, can an end or a limit be found to the Western Sea? Its vapor is full of darkness." The above-mentioned Colombo saw that no help was forthcoming from the Genoese, he sped forth, went to the Bay of Spain [king], and told his tale in detail. They too answered like the Genoese. In brief Colombo petitioned these people for a long time, finally the Bay of Spain gave him two ships, saw that they were well equipped, and said:

O Colombo, if it happens as you say, let us make you kapudan [admiral] to that country." Having said which he sent the said Colombo to the Western Sea. The late Gazi Kemal had a Spanish slave. The above-mentioned slave said to Kemal Reis, he had been three times to that land with Colombo. He said: "First we reached the Strait of Gibraltar, then from there straight south and west between the two . . . [illegible]. Having advanced straight four thousand miles, we saw an island facing us, but gradually the waves of the sea became foamless, that is, the sea was becalmed and the North Star—the seamen on their compasses still say star—little by little was veiled and became invisible, and he also said that the stars in that region are not arranged as here. They are seen in a different arrangement. They anchored at the island which they had seen earlier across the way, the population of the island came, shot arrows at them and did not allow them to land and ask for information. The males and the females shot hand arrows. The tips of these arrows were made of fishbones, and the whole population went naked and also very ... [illegible]. Seeing that they could not land on that island; they crossed to the other side of the island, they saw a boat. On seeing them; the boat fled and they [the people in the boat] dashed out on land. They [the Spaniards] took the boat. They saw that inside of it there was human flesh. It happened that these people were of that nation which went from island to island hunting men and eating them. They said Colombo saw yet another island, they neared it, they saw that on that island there were great snakes. They avoided landing on this island and remained there seventeen days. The people of this island saw that no harm came to them from this boat, they caught fish and brought it to them in their small ship's boat [filika]. These [Spaniards] were pleased and gave them glass beads. It appears that he [Colombus] had read—in the book that in that region glass beads were valued. Seeing the beads they brought still more fish. These [Spaniards] always gave them glass beads. One day they saw gold around the arm of a woman, they took the gold and gave her beads. They said to them, to bring more gold, we will give you more beads, [they said]. They went and brought them much gold. It appears that in their mountains there were gold mines. One day, also, they saw pearls in the hands of one person. They saw them when; they gave beads, many more pearls were brought to them. Pearls were found on the shore of this island, in a spot one or two fathoms deep. And also loading their ship with many logwood trees and taking two natives along, they carried them within that year to the Bey of Spain. But the said Colombo, not knowing the language of these people, they traded by signs, and after this trip the Bey of Spain sent priests and barley, taught the natives how to sow and reap and converted them to his own religion. They had no religion of any sort. They walked naked and lay there like animals. Now these regions have been opened to all and have become famous. The names which mark the places on the said islands and coasts were given by Colombo, that these places may be known by them. And also Colombo was a great astronomer. The coasts and island on this map are taken from Colombo's map.

VI. This section shows in what way this map was drawn. In this century there is no map like this map in anyone's possession. The hand of this poor man has drawn it and now it is constructed. From about twenty charts and Mappae Mundi, these are charts drawn in the days of Alexander, Lord of the Two Horns, which show the inhabited quarter of the world; the Arabs name these charts Jaferiye—from eight Jaferiyes of that kind and one Arabic map of Hind, and from the maps just drawn by four Portuguese which show the countries of Hind, Sind and China geometrically drawn, and also from a map drawn by Colombo in the western region I have extracted it. By reducing all these maps to one scale this final form was arrived at. So that the present map is as correct and reliable for the Seven Seas as the map of these our countries is considered correct and reliable by seamen.

VII. It is related by the Portuguese infidel that in this spot night and day are at their shortest of two hours, at their longest of twenty two hours. But the day is very warm and in the night there is much dew.

VIII. On the way to the village of Hind a Portuguese ship encountered a contrary wind [blowing] from the shore. The wind from the shore . . . [illegible] it [the ship]. After being driven by a storm in a southern direction they saw a shore opposite them they advanced towards it [illegible]. They saw that these places are good anchorages. They threw anchor and went to the shore in boats. They saw people walking, all of them naked. But they shot arrows, their tips made of fishbone. They stayed there eight days. They traded with these people by signs. That barge saw these lands and wrote about them which.... The said barge without going to Hind, returned to Portugal, where, upon arrival gave information.... They described these shores in detail.... They have discovered them.

IX. And in this country it seems that there are white-haired monsters in this shape, and also six-horned oxen. The Portuguese infidels have written it in their maps....

X. This country is a waste. Everything is in ruin and it is said that large snakes are found here. For this reason the Portuguese infidels did not land on these shores and these are also said to be very hot.

XI. And these four ships are Portuguese ships. Their shape is written down. They traveled from the western land to the point of Abyssinia [Habesh] in order to reach India. They said towards Shuluk. The distance across this gulf is 4200 miles.

XII.... on this shore a tower ... is however ... in this climate gold . . . taking a rope ... is said they measured

[NOTE: The fact that half of each of these lines is missing is the clearest proof of the map's having been torn in two.]

XIII. And a Genoese kuke [a type of ship] coming from Flanders was caught in a storm. Impelled bv the storm it came upon these islands, and in this manner these islands became known.

XIV. It is said that in ancient times a priest by the name of Sanvolrandan (Santo Brandan) travelled on the Seven Seas, so they say. The above-mentioned landed on this fish. They thought it dry land and lit a fire upon this fish, when the fish's back began to burn it plunged into the sea, they reembarked in their boats and fled to the ship. This event is not mentioned by the Portuguese infidels. It is taken from the ancient Mappae Mundi.

XV. To these small islands they have given the name of Undizi Vergine. That is to say the “Eleven Virgins”.

XVI. And this island they call the Island of Antilia. There are many monsters and parrots and much logwood. It is not inhabited.

XVII. This barge was driven upon these shores by a storm and remained where it fell.... Its name was Nicola di Giuvan. On his map it is written that these rivers that can be seen have for the most part gold [in their beds]. When the water has gone they collected much gold [dust] from the sand. On their map....

XVIII. This is the barge from Portugal that encountered a storm and came to this land. The details are written on the edge of this map. [NOTE: see VIII.]

XIX. The Portuguese infidels do not go west of here. All that side belongs entirely to Spain. They have made an agreement that [a line] two thousand miles to the western side of the Strait of Gibraltar should be taken as a boundary. The Portuguese do not cross to that side but the Hind side and the southern side belongs to the Portuguese.

XX. And this caravel having encountered a storm was driven upon this island. Its name was Nicola Giuvan. And on this island there are many oxen with one horn. For this reason they call this island Isle de Vacca, which means, “Ox Island”.

XXI. The admiral of this caravel is named Messir Anton the Genoese, but he grew up in Portugal. One day the above-mentioned caraval encountered a storm, it was driven upon this island. He found much ginger here and has written about these islands.

XXII. This sea is called the Western Sea, but the Frank sailors call it the Mare d'Espagna. Which means the Sea of Spain. Up to now it was known by these names, but Colombo, who opened up this sea and made these islands known, and also the Portuguese, infidels who have opened up the region of Hind have agreed together to give this sea a new name. They have given it the name of Ovo Sano [Oceano] that is to say, sound egg. Before this it was thought that the sea had no end or limit, that at its other end was darkness. Now they have seen that this sea is girded by a coast, because it is like a lake, they have called it Ovo Sano.

XXIII. In this spot there are oxen with one horn, and also monsters in this shape.

XXIV. These monsters are seven spans long. Between their eyes there is a distance of one span. But they are harmless souls.

Fifteen years after this first map, Pin Reis drew a second one, again at Gelibolu. Like the previous one it bears his signature. Unfortunately today we have only a small portion of it i.e. a small portion of the western hemisphere. It is 68/69 centimeters in size. Ornamental figures are drawn in the margins and most of it is in color.

There we find the northern part of the Atlantic Ocean and the newly discovered regions of North and Central America. There are four wind-roses on it. The tropic of Cancer is shown here, though it was not on the first map. There are also scales of mules on it, each with twenty divisions. From the notes beside them we gather that the distance between the divisions stand for 50 miles, and that between two dots for 10 miles. The scales here are bigger than in the previous one. We see Greenland in the north and the Azores towards the south. Some of the latter bear the names San Mikal, Santa Mariya, Eurik, and San Jorjo. To the south of Greenland two large pieces of land are shown; the one in the north is called Baccalao. On the map there is a note saying that Baccalao was discovered by the Portuguese. In another note further down near Terra Nova he says that though these coasts were discovered by the Portuguese, all is not known as yet, and only the parts that have been discovered are shown on the map. Further south still one can see the Peninsula of Florida drawn very much as we know it today. He calls it San Juan Batisto. The name was first given to Puerto Rico on the previous map.

The pieces of land seen at the side are the peninsulas of Honduras and Yucatan, discovered in 1517 and 1519 respectively. Unlike the first map, drawn under the influence of Columbus, the islands of' Cuba, Haiti, the Bahamas and the Antilles are drawn quite accurately. One can read the words Is! di Vana over Cuba. Although there are numerous names along the coast of Venezuela, very few can be read. Among the legible words are San Cilormi, Monte Krago, Detonos, Die Sagram, Ponte Sogon, Didas and Sare.

In this second map the drawing of the coastlines shows greater improvement in technique and also close resemblance to the modern conception of these areas. The stony and rocky sections are given special care. There is, however, a slight distortion in the map from the true position of the continent as we know it today. This error was committed, due to neglect in not taking into consideration the ten to thirteen degrees of difference in angle on the contemporary compass. This error is to be observed in all the contemporary maps without any exception.

On this map, as on the previous one, there are some explanatory notes, but they are recorded more briefly. The note on the left-hand corner of the map, under the scales with the long and ornamental points, gives the signature of the author as well as the date 1528 (A. H. 935). Beside the measurements there is a note indicating the mileage, where he says that the distance between two sections is 50 miles and between two dots 10 miles.

Over the second set of scales further north he says again that the distance between two sections is 50 miles and between two dots 10. The idea in the two statements is the same but one or two words differ.

Beside place-names in the notes near Labrador he says "This is Baccalao, The Portuguese infidels discovered it. All that is known about it is recorded here". From the position on the map we understand that these coasts are of "Terra Nova". Today we know that the Portuguese explorer, Carl Real, discovered Terra Nova in 1500, and his brother, Miguel Real, a year later in 1501, discovered Labrador.

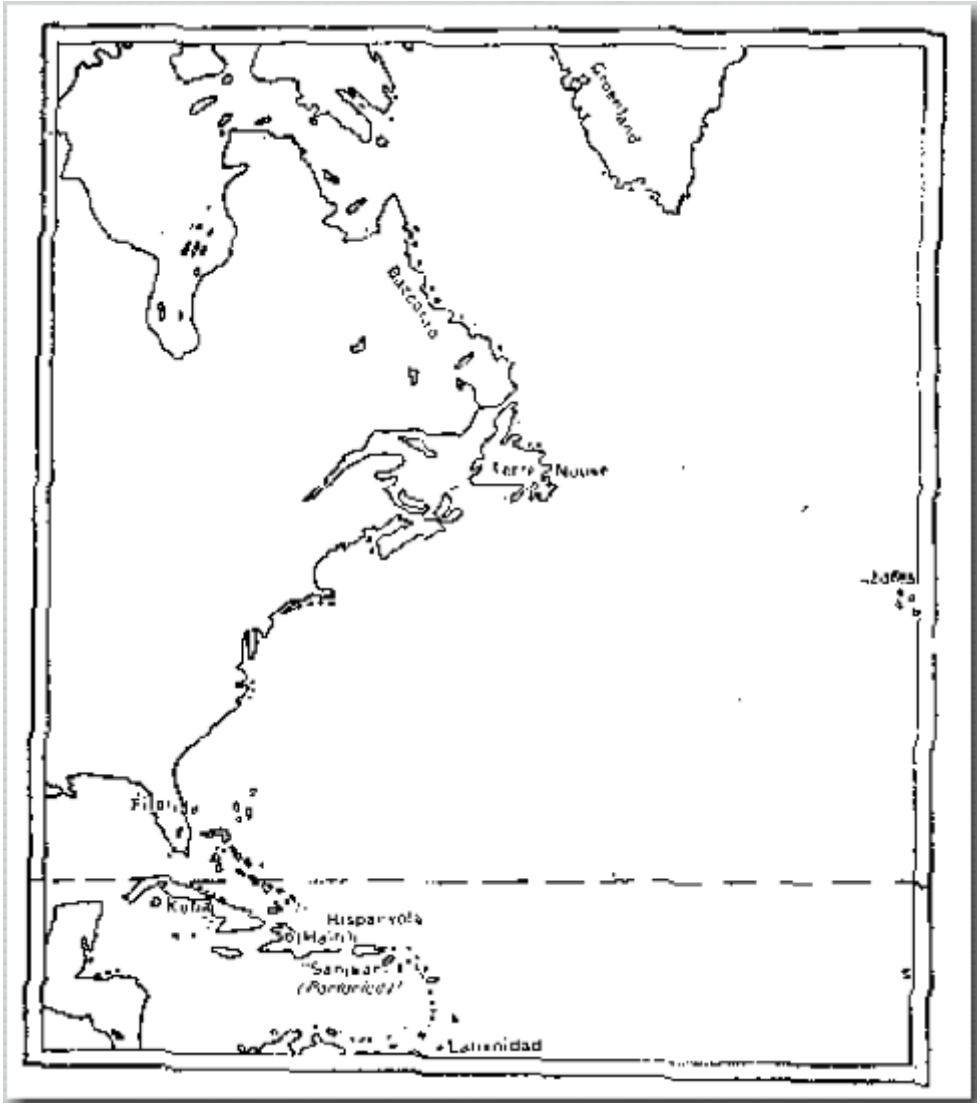
Though part of the note over Central America is damaged what remains is quite interesting. "Dividing the land... to find where the sea begins... the vilayet that... beyond which", can be read. Here there is a reference to an explorer who planned to cross overland to reach the ocean. It is quite possible that Piri meant by that Balboa who crossed Central America and reached the Pacific Ocean in 1513.

Another interesting term used on the map is what he calls the tropics: "Day's Lengthening". In his own words the explanation runs as follows: "Bu hat gu"n gayet uzadigi yere isarettir" which means that these lines indicate the part of the world where the days grow longer.

The line drawn over Cuba should, of course have been drawn further north, and the peninsula of Yucatan should have been put entirely below it; but that much accuracy could not be expected of the cartographical technique of the period.

Such technical errors can be observed also in other contemporary maps. We should, therefore, acknowledge the greatness and value of the work among other maps of the period after pointing out briefly to its various merits and demerits.

As it can be easily observed from this map, Pin Reis continued following the new discoveries with great interest. It is remarkable that, by taking into account the results of the new discoveries, he should correct in this map the inaccuracies of the first in which he was misled through his unquestioning confidence in Columbus' map. In this second map Pin Reis showed only the parts of the world that had been already discovered and left the unexplored areas blank, explaining this by the fact that they were as yet unknown. Thus, Pin proved, once again, how he observed the principles of scientific methods in drawing this map.



Location: Topkapi Saray Museum, Istanbul

Size: 90 X 63 cm

References:

*George, W., Animals and Maps, pp. 60-62, Figure 3.2

*Hapgood, C.H., Maps of the Ancient Sea Kings, pp. 4-68

*McIntosh, G.C., The Piri Reis Map of 1513

*Nebenzahl, K., Atlas of Columbus, pp. 62-63, Plate 20

*Wolff, J., Maps of North America, p. 43, #62